



Arch Chemicals, Inc.

MATERIAL SAFETY DATA

FOR ANY EMERGENCY, CALL 24 HOURS/7 DAYS:	1-800-654-6911
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:	1-800-424-9300
FOR ALL MSDS QUESTIONS & REQUESTS, CALL MSDS CONTROL:	1-800-511-MSDS

PRODUCT NAME: HTH® SPA PH INCREASER

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

REVISION DATE: 10-24-2003 SUPERCEDES: 09-10-2003
MSDS NO: 01918-0001 - 86207

MANUFACTURER: Arch Chemicals, Inc. 501 Merritt 7 PO Box 5204 Norwalk, CT 06856-5204

SYNONYMS: Potassium carbonate solution
CHEMICAL FAMILY: Inorganic carbonate
FORMULA: K_2CO_3
USE DESCRIPTION: To increase the pH of spa water
OSHA HAZARD CLASSIFICATION: Eye hazard; skin, eye and respiratory irritant

SECTION 2 COMPONENT DATA

PRODUCT COMPOSITION

CAS or CHEMICAL NAME: Potassium carbonate
CAS NUMBER: 584-08-7
PERCENTAGE RANGE: 25-35%
HAZARDOUS PER 29 CFR 1910.1200: Yes
EXPOSURE STANDARDS: None Established

CAS or CHEMICAL NAME: Water
CAS NUMBER: 7732-18-5
PERCENTAGE RANGE: 65-75%
HAZARDOUS PER 29 CFR 1910.1200: No
EXPOSURE STANDARDS: None Established

SECTION 3 PRECAUTIONS FOR SAFE HANDLING AND STORAGE

DO NOT TAKE INTERNALLY. AVOID CONTACT WITH SKIN, EYES AND CLOTHING. UPON CONTACT WITH SKIN OR EYES, WASH OFF WITH WATER. AVOID BREATHING MIST
STORAGE CONDITIONS:

STORE IN A COOL, DRY, WELL VENTILATED PLACE.

PRODUCT STABILITY AND COMPATIBILITY

SHELF LIFE LIMITATIONS: No Data

INCOMPATIBLE MATERIALS FOR STORAGE OR TRANSPORT: Acids

SECTION 4 PHYSICAL DATA

APPEARANCE: Clear liquid
FREEZING POINT: No Data
BOILING POINT: 99 Deg.C (210 Deg.F)

DECOMPOSITION TEMPERATURE: Stable at least up to boiling point
SPECIFIC GRAVITY: 1.2
BULK DENSITY: 1.2 (g/cc)
pH @ 25 DEG.C: 11-13
VAPOR PRESSURE @ 25 DEG.C: No Data
SOLUBILITY IN WATER: Completely miscible
VOLATILES, PERCENT BY VOLUME: Approximately 70-80%
EVAPORATION RATE: No Data
VAPOR DENSITY: Vapor is water vapor
MOLECULAR WEIGHT: 138 (active ingredient)
ODOR: Bland odor
COEFFICIENT OF OIL/WATER DISTRIBUTION: No Data

SECTION 5 PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS

PERSONAL PROTECTION FOR ROUTINE USE OF PRODUCT:

RESPIRATORY PROTECTION:

Respirator protection not normally needed. If vapors, mists, or aerosols are generated, wear a NIOSH approved respirator.

VENTILATION:

Local exhaust ventilation is recommended if vapors, mists or aerosols are generated. Otherwise, use general exhaust ventilation.

SKIN AND EYE PROTECTIVE EQUIPMENT:

Use chemical goggles and impermeable gloves.

Eye wash station and safety shower should be provided in the immediate work area.

EQUIPMENT SPECIFICATIONS (WHEN APPLICABLE)

RESPIRATOR TYPE: Not normally required. If spraying or misting occurs, use a NIOSH approved dust/mist filter respirator.

PROTECTIVE CLOTHING TYPE (This includes: gloves, boots, apron, protective suit): Impervious

SECTION 6 FIRE AND EXPLOSION HAZARD INFORMATION

FLAMMABILITY DATA:

EXPLOSIVE: No
FLAMMABLE: No
COMBUSTIBLE: No
PYROPHORIC: No

FLASH POINT: None

AUTOIGNITION TEMPERATURE: Not flammable

FLAMMABLE LIMITS AT NORMAL ATMOSPHERIC TEMPERATURE AND PRESSURE (PERCENT VOLUME IN AIR): LEL - Not Applicable UEL - Not Applicable

NFPA RATINGS:

None Established

HMIS RATINGS:

Health: 2
Flammability: 0
Reactivity: 0

EXTINGUISHING MEDIA:

Not Applicable-Choose extinguishing media suitable for surrounding materials.

FIRE FIGHTING TECHNIQUES AND COMMENTS:

Use water to cool containers exposed to fire.

See Section 11 for protective equipment for fire fighting.

SECTION 7 REACTIVITY INFORMATION

CONDITIONS UNDER WHICH THIS PRODUCT MAY BE UNSTABLE:

TEMPERATURES ABOVE: Stable at normal temperatures

MECHANICAL SHOCK OR IMPACT: No

ELECTRICAL (STATIC) DISCHARGE: No

HAZARDOUS POLYMERIZATION: Will not occur

INCOMPATIBLE MATERIALS: May react very violently with acids, liberating carbon dioxide gas

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide and calcium oxide on heating; carbon dioxide on contact with acids

OTHER CONDITIONS TO AVOID: Unintended contact with acids

SUMMARY OF REACTIVITY:

EXPLOSIVE: No

OXIDIZER: No

PYROPHORIC: No

ORGANIC PEROXIDE: No

WATER REACTIVE: No

SECTION 8 FIRST AID

EYES:

Immediately flush with large amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Call a physician at once.

SKIN:

Immediately flush with water for 15 minutes. Wash the contaminated skin with soap and water. If irritation develops, call a physician. If clothing comes in contact with the product, the clothing should be laundered before re-use.

INGESTION:

Immediately drink water to dilute. Consult a physician if symptoms develop.

INHALATION:

Remove person to fresh air. If respiratory irritation develops, call a physician.

SECTION 9 TOXICOLOGY AND HEALTH INFORMATION

ROUTES OF ABSORPTION

Inhalation, ingestion, skin and eye contact

WARNING STATEMENTS AND WARNING PROPERTIES

CAUSES MODERATE TO SEVERE EYE IRRITATION. CAUSES SKIN IRRITATION. CAUSES RESPIRATORY IRRITATION. DO NOT TAKE INTERNALLY.

HUMAN THRESHOLD RESPONSE DATA

ODOR THRESHOLD: No Data

IRRITATION THRESHOLD: No Data

IMMEDIATELY DANGEROUS TO LIFE OR HEALTH: The IDLH concentration has not been established for this product.

SIGNS, SYMPTOMS, AND EFFECTS OF EXPOSURE

INHALATION

ACUTE:

Inhalation of vapors, mists or aerosol may cause irritation to the throat, mucous membranes, and upper respiratory tract. Any irritation would be expected to be transient with no permanent damage expected.

CHRONIC:

No effects would be expected except for those listed under acute inhalation exposure.

SKIN

ACUTE:

Skin contact would be expected to cause an irritation consisting of transient redness. This irritant effect would not result in permanent damage.

CHRONIC:

There are no known or reported effects from prolonged or repeated skin contact.

EYE

Contact with the eyes would be expected to cause a moderate to severe irritation consisting of redness, swelling and mucous membrane discharge to the conjunctiva. Contact may cause corneal damage or visual impairment to occur.

INGESTION

ACUTE:

Ingestion may cause gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting, lethargy or diarrhea.

CHRONIC:

There are no known or reported effects from chronic exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None known or reported.

INTERACTIONS WITH OTHER CHEMICALS WHICH ENHANCE TOXICITY

None known or reported

ANIMAL TOXICOLOGY

ACUTE TOXICITY:

Inhalation LC 50: No Data

Dermal LD 50: No Data

Oral LD 50: Believed to be > 5 g/kg. (rat)

Irritation: Causes moderate to severe eye irritation. Causes skin irritation. May cause mucous membrane and respiratory tract irritation.

ACUTE TARGET ORGAN TOXICITY:

Irritation to the eyes, skin, lungs and mucous membranes.

CHRONIC TARGET ORGAN TOXICITY:

There are no known or reported effects from repeated exposure to this product.

REPRODUCTIVE AND DEVELOPMENTAL TOXICITY:

Potassium Carbonate has been tested and was found to be non-teratogenic when administered orally to both pregnant rats and mice.

CARCINOGENICITY:

This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

MUTAGENICITY:

Potassium carbonate has been tested and was found to be non-mutagenic in the Salmonella/microsome mutagenesis assay (Ames assay).

AQUATIC TOXICITY:

No Data for product.

SECTION 10 TRANSPORTATION INFORMATION

THIS MATERIAL IS NOT REGULATED AS A DOT HAZARDOUS MATERIAL.

SECTION 11 SPILL AND LEAKAGE PROCEDURES

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC AT 800-424-9300.

REPORTABLE QUANTITY: Not Applicable (Per 40 CFR 302.4)

SPILL MITIGATION PROCEDURES:

Evacuate all non-essential personnel. Hazardous concentrations in air may be found in local spill area. Stop source of spill as soon as possible and notify appropriate personnel.

AIR RELEASE: Vapors may be suppressed by the use of water fog.

WATER RELEASE: This material is heavier than and soluble in water.
Notify all downstream users of possible contamination.
Divert water flow around spill if possible and safe to do so.

LAND SPILL: Create a dike or trench to contain materials. Spill materials may be absorbed using any absorbant material.
Containerize and label all spill materials properly.
Decontaminate all clothing and the spill area using detergent and flush with large amounts of water.

SPILL RESIDUES:

Dispose of per guidelines under Section 12, WASTE DISPOSAL.

PERSONAL PROTECTION FOR EMERGENCY SPILL AND FIRE-FIGHTING SITUATIONS:

No extra protection required beyond that listed in Section 5. In case of fire, use normal fire fighting equipment, including a self-contained breathing apparatus (SCBA).

SECTION 12 WASTE DISPOSAL

If this product becomes a waste, it meets the criteria of a hazardous waste as defined under 40 CFR 261 and would have the following EPA hazardous waste number: D002.

If this product becomes a waste, it will be a hazardous waste which is subject to the Land Disposal Restrictions under 40 CFR 268 and must be managed accordingly.

As a hazardous liquid waste, it must be disposed of in accordance with local, state and federal regulations in a permitted hazardous waste treatment, storage and disposal facility by treatment.

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THIS MATERIAL. THE USER OF THIS MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

SECTION 13 ADDITIONAL REGULATORY STATUS INFORMATION

TOXIC SUBSTANCES CONTROL ACT:

This substance is listed on the Toxic Substances Control Act inventory.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT TITLE III:

HAZARD CATEGORIES, PER 40 CFR 370.2:

HEALTH:

Immediate (Acute)

PHYSICAL:

None

EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW, PER 40 CFR 355, APP.A:

EXTREMELY HAZARDOUS SUBSTANCE - THRESHOLD PLANNING QUANTITY:

None Established

SUPPLIER NOTIFICATION REQUIREMENTS, PER 40 CFR 372.45:

None Established

SECTION 14 ADDITIONAL INFORMATION

No Additional Information

SECTION 15 MAJOR REFERENCES

1. Teratologic Evaluation of FDA 73-76, Potassium Carbonate in Mice and Rats. NTIS PB Report (PB-245-522), National Technical Information Service, Springfield, VA, March 3, 1975.
2. Ishidate, Jr., M. et al. 1984. Primary Mutagenicity Screening of Food Additives Currently Used in Japan. Food and Chemical Toxicology, Vol. 22, No. 8, pp. 623-636.

Other References are available upon request.

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. ARCH CHEMICALS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT ARCH CHEMICALS MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT.

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MSDS Control

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